ABBREVIATIONS USED IN TEXT
ATV = all-terrain vehicle
CPSC = Consumer Product Safety Commission

Furthermore, it is essential that police enforce existing laws that prohibit the use of unregistered vehicles (most ATVs) on public roads. Manufacturers and retailers can assist injury prevention efforts by emphasizing the use of protective gear, such as helmets, and by marketing ATVs only for older ATV riders. States can develop safety training manuals[4] and sponsor ATV safe-riding courses. The need for training is shown by the fact that 47% of those injured by collision and 26% of those injured when the vehicle overturned had less than a month's driving experience.[1] Studies that compare the relative stability of three-wheeled ATVs with two- and four-wheeled cycles are needed. Preliminary data suggest that the three-wheeled ATVs are more dangerous than four-wheeled ATVs.[5] Hospital-based studies to document the extent of the problem could be better achieved by improving medical record documentation and coding of ATV accidents.

REFERENCES

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Medical Practice Question

EDITOR'S NOTE: *From time to time medical practice questions from organizations with a legitimate interest in the information are referred to the Scientific Board by the Quality Care Review Commission of the California Medical Association. The opinions offered are based on training, experience and literature reviewed by specialists. These opinions are, however, informational only and should not be interpreted as directives, instructions or policy statements.*

Diagnosis of Obstructive Sleep Apnea in Children

QUESTION:

What criteria are necessary for the diagnosis of obstructive sleep apnea in children?

OPINION:

In the opinion of the Scientific Advisory Panels on Otolaryngology/Head and Neck Surgery and Pediatrics, the diagnosis of obstructive sleep apnea, described physiologically as a cessation of airflow at the nose and mouth with the concomitant occurrence of inspiratory efforts, can be established in children by a thorough history and physical examination. Criteria necessary to make this diagnosis must include a history of snoring and apnea during sleep (documented by reliable observers) and usually include some or many of the following signs: restless sleep and abnormal sleep positions; repetitive awakening at night; nocturnal enuresis; daytime somnolence; mouth breathing while awake; large tonsils and adenoids; craniofacial abnormalities; irritability, and hyperactivity.

Though it is not always necessary, the polysomnogram is the only sleep study that can provide a definitive diagnosis of obstructive sleep apnea. This multi-channel recording of physiologic parameters during sleep varies in its components from center to center. To diagnose significant sleep apnea, however, it must include a measure of airflow, chest wall movement and oxygenation. Significant obstructive apnea on a polysomnogram is defined as the absence of airflow in the presence of chest wall movement for more than 15 seconds (or of shorter duration if associated with arrhythmia, hypoxemia and hypercarbia). Significant partial obstructive apnea is defined as an impairment or partial absence of airflow associated with the three conditions just noted. Polysomnography should be used when the results will clearly make a difference in the differential diagnosis or in the treatment plan. The pneumogram, which measures impedance respiration and heart rate, is not polysomnography and is totally inappropriate for the study of suspected obstructive sleep apnea.

Finally, obstructive sleep apnea in children must *not* be confused with apnea of infancy, the so-called near-miss sudden infant death syndrome, which is generally defined as an unexplained episode of cessation of breathing for 20 seconds or longer, or a shorter respiratory pause associated with bradycardia, cyanosis or pallor.